



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/530,613	04/07/2005	Klaus Lietzau	10537/288	6750
26646 7590 08/26/2008 KENYON & KENYON LLP ONE BROADWAY NEW YORK, NY 10004				
EXAMINER NORTON, JENNIFER L				
ART UNIT 2121		PAPER NUMBER		
MAIL DATE 08/26/2008		DELIVERY MODE PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/530,613

Applicant(s)

LIETZAU, KLAUS

Examiner

Jennifer L. Norton

Art Unit

2121

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 June 2008.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-36 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 21-36 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 07 April 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-8508)
Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

1. The following is a **Final Office Action** in response to the Amendment received on 10 June 2008. Claims 27, 33 and 35 have been amended. Claims 1-20 are previously cancelled. Claims 21-36 are pending in this application.

Claim Objections

2. The amendment to the claims was received on 10 June 2008. The correction is acceptable and the objection is withdrawn.

Claim Rejections - 35 USC § 112

3. Applicant's arguments, Remarks pg. 7, filed 10 June 2008 with respect to claim 26 under 35 U.S.C. 112, second paragraph have been fully considered and are persuasive. The rejection of claim 26 under 35 U.S.C. 112, second paragraph has been withdrawn.

4. The amendment to the claims 27 and 28 were received on 10 June 2008. The correction is acceptable and the rejection of claims 27 and 28 are withdrawn.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 21-24, 27-29 and 32 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 6,171,055 (hereinafter Vos).

7. As per claim 21, Vos discloses a multivalve control system, comprising:

a controlled multivalve system (col. 5, lines 24-29 and Fig. 1) including a plurality of correcting variables as input variables (col. 6, lines 1-8 and 13-19) and a plurality of controlled variables as output variables (col. 5, lines 65-67);

a plurality of controllers (col. 7, lines 2-8 and 10-15 and Fig. 2, element 66 and 68);

a plurality of comparators (Fig. 2) configured to ascertain control deviations and to supply a control deviation to each controller as an input variable (col. 7, lines 2-15);
and

a conversion device (Fig. 1, element 30), input variables of the conversion device corresponding to output variables of the controllers, the conversion device configured to calculate, at least from the output variables of the controllers, the correcting variables, the conversion device configured to superimpose, on the output variables of the controllers (col. 7, lines 2-8 and 10-15), an input control component that is a function of an actual value to calculate the correcting variables (col. 6, lines 1-8 and 13-19).

8. As per claim 22, Vos discloses the conversion device is configured to calculate the correcting values by an offset of the output variables of the controllers against each other (col. 7, lines 24-37; i.e. the curves of thrust and thrust efficiency).

9. As per claim 23, Vos discloses the conversion device is configured to offset the output variables of the controllers as a function of the controlled multivalue system (col. 7, lines 24-37; i.e. the curves of thrust and thrust efficiency).

10. As per claim 24, Vos discloses a first controlled variable conversion device (Fig. 1, element 30), the controlled variables arranged to be supplied to the first controlled variable conversion device as input variables (col. 6, lines 1-8 and 13-19), the first controlled variable conversion device configured to ascertain output variables from the controlled variables and to supply the output variables to the comparators (Fig. 2) as first input variables (col. 7, lines 2-8).

11. As per claim 27, Vos discloses a method for controlling a controlled multivalue system, comprising:

supplying a plurality of correcting variables to the controlled multivalue system (col. 5, lines 24-29 and Fig. 1) as input variables (col. 7, lines 24-37; i.e. the curves of thrust and thrust efficiency);

offsetting a plurality of controlled variables against one another as output

variables of the controlled multivalued system to ascertain control deviations (col. 7, lines 2-15);

supplying each control deviation to a respective controller (Fig. 2, element 66 and 68) as an input variable (col. 7, lines 2-15);

supplying output variables from the controllers to a conversion device (Fig. 1, element 30) as input variables (col. 6, lines 1-8 and 13-19); and

calculating the correcting variables in the conversion device (Fig. 1, element 30) at least from the output variables from the controllers (col. 6, lines 1-8 and 13-19 and col. 7, lines 2-15), the calculating including offsetting the output variables of the controllers against each other using an input control component that is a function of an actual value (col. 6, lines 1-8 and 13-19 and col. 7, lines 2-15).

12. As per claim 28, Vos discloses ascertaining the correcting variables in accordance with the offsetting of the output variables of the controllers against each other (col. 7, lines 24-37; i.e. the curves of thrust and thrust efficiency).

13. As per claim 29, Vos discloses supplying the controlled variables of the controlled multivalued system to a first controlled variable conversion device as input variables (col. 6, lines 1-8 and 13-19 and col. 7, lines 2-8);

ascertaining output variables by the first controlled variable conversion device from the controlled variables (col. 7, lines 2-8); and

supplying the output variables ascertained by the first controlled variable conversion device to comparators as first input variables (col. 7, lines 2-8).

14. As per claim 32, Vos discloses a method for controlling a propeller power unit, comprising:

controlling a propeller speed and a propeller performance as controlled variables (col. 5, lines 65-67 and col. 6, lines 13-24);

supplying a propeller blade angle of incidence (i.e. the curves of the map are characterized by a function of pitch angle) and a fuel stream (the curves of the map are characterized by a function of fuel consumption) to the propeller power unit as correcting variables (col. 7, lines 24-30);

supplying output variables from controllers to a conversion device (Fig. 2, element 62 (incorporated in Fig. 1, element 30) as input variables (col. 6, lines 6-8);

ascertaining, by the conversion device, the propeller blade angle of incidence (i.e. the curves of the map are characterized by a function of pitch angle) and the fuel stream (the curves of the map are characterized by a function of fuel consumption) as the controlled variables from the output variables from the controllers (col. 6, lines 6-8 and col. 7, lines 2-15) ;

offsetting, in the conversion device (Fig. 2, element 62), the output variables from the controllers against each other (col. 7, lines 15-19); and

offsetting, in the conversion device (Fig. 2, element 62), the output variables from the controllers using an input control component that is a function of an actual value (col. 6, lines 6-8 and col. 7, lines 2-19).

Claim Rejections - 35 USC § 103

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. Claims 25, 26, 30 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vos in view of U.S. Patent No. 5,951,608 (hereinafter Osder).

17. As per claim 25, Vos does not expressly teach a second controlled variable conversion device, setpoint values of the controlled variables configured to be supplied to the second controlled variable conversion device as input variables, the second controlled variable conversion device configured to ascertain output values from the setpoint values and to supply the output values to the comparators as second input variables.

Osdeer teaches a second controlled variable conversion device (Fig. 6, element 524), setpoint values (Fig. 6, element 522) of the controlled variables configured to be supplied to the second controlled variable conversion device as input variables (col. 10,

lines 48-59), the second controlled variable conversion device configured to ascertain output values from the setpoint values and to supply the output values to the comparators (Fig. 6, element 520) as second input variables (col. 10, lines 40-47 and col. 11, lines 4-10).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the teaching of Vos to include a second controlled variable conversion device, setpoint values of the controlled variables configured to be supplied to the second controlled variable conversion device as input variables, the second controlled variable conversion device configured to ascertain output values from the setpoint values and to supply the output values to the comparators as second input variables to avoid entering autogyro states, and not requiring flight path changes, such as dives, to enter a conversion regime where the rotor is stopped (col. 2, lines 2-6).

18. As per claim 26, Vos does not expressly teach the comparators are configured to offset the first input variables against corresponding second input variables and to supply control deviations resulting from the offset to the controllers as input variables.

Osder teaches the comparators (Fig. 6, element 520) are configured to offset the first input variables (col. 10, lines 40-45) against corresponding second input variables

and to supply control deviations resulting from the offset to the controllers as input variables (col. 11, lines 4-10 and 32-35).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the teaching of Vos to include the comparators are configured to offset the first input variables against corresponding second input variables and to supply control deviations resulting from the offset to the controllers as input variables to avoid entering autogyro states, and not requiring flight path changes, such as dives, to enter a conversion regime where the rotor is stopped (col. 2, lines 2-6).

19. As per claim 30, Vos does not expressly teach supplying setpoint values of the controlled variables to a second controlled variable conversion device as input variables; ascertaining output variables by the second controlled variable conversion device from the setpoint values; and supplying the output variables ascertained by the second controlled variable conversion device to the comparators as second input variables.

Osder teaches supplying setpoint values (Fig. 6, element 522) of the controlled variables to a second controlled variable conversion device (Fig. 6, element 524) as input variables (col. 10, lines 48-59); ascertaining output variables by the second controlled variable conversion device from the setpoint values (col. 10, lines 40-59);

and supplying the output variables ascertained by the second controlled variable conversion device to the comparators (Fig. 6, element 520) as second input variables (col. 10, lines 40-47 and col. 11, lines 4-10).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the teaching of Vos to include supplying setpoint values of the controlled variables to a second controlled variable conversion device as input variables; ascertaining output variables by the second controlled variable conversion device from the setpoint values; and supplying the output variables ascertained by the second controlled variable conversion device to the comparators as second input variables to avoid entering autogyro states, and not requiring flight path changes, such as dives, to enter a conversion regime where the rotor is stopped (col. 2, lines 2-6).

20. As per claim 31, Vos does not expressly teach offsetting the first input variables of the comparators and corresponding second input variables of the comparators against each other; and supplying control deviations resulting from the offsetting of the first input variables of the comparators and the corresponding second input variables of the comparators to the controllers as input variables.

Osder teaches offsetting the first input variables of the comparators (Fig. 6, element 520) and corresponding second input variables of the comparators against

each other (col. 10, lines 40-45); and supplying control deviations resulting from the offsetting of the first input variables of the comparators and the corresponding second input variables of the comparators to the controllers as input variables (col. 11, lines 4-10 and 32-35).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the teaching of Vos to include the first input variables of the comparators and corresponding second input variables of the comparators against each other; and supplying control deviations resulting from the offsetting of the first input variables of the comparators and the corresponding second input variables of the comparators to the controllers as input variables to avoid entering autogyro states, and not requiring flight path changes, such as dives, to enter a conversion regime where the rotor is stopped (col. 2, lines 2-6).

21. Claims 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Vos in view of U.S. Patent No. 6,856,039 (hereinafter Mikhail).

22. As per claim 33, Vos teaches supplying the propeller speed and the propeller performance (col. 5, lines 65-67 and col. 6, lines 13-24) as the correcting variables of the propeller power unit to a first controlled variable conversion device as input variables (col. 7, lines 24-30); and

outputting, by the first controlled variable conversion device, as output variables, actual values (col. 6, lines 6-8 and col. 7, lines 2-19).

Vos does not expressly teach output variables actual variables for the propeller speed and a turbine output.

Mikhail teaches output variables actual variables for the propeller speed and a turbine output (col. 5, lines 45-52).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the teaching of Vos to include output variables actual variables for the propeller speed and a turbine output to provide maximal energy capture, torque control, elimination of voltage flicker, as well as power factor control (col. 20, lines 10-13).

23. Claims 34-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vos in view of Mikhail in further view of Osder.

24. As per claim 34, Vos does not expressly teach supplying setpoint values for the propeller speed and the propeller performance to a second controlled variable conversion device as input variables; and outputting, by the second controlled variable conversion device, setpoint values for the propeller speed and the turbine output.

Mikhail teaches supplying setpoint values for the propeller speed (col. 7, lines 51-53 and col. 8, lines 47-54 and 66-67) and the propeller performance (col. 5, lines 24-44, col. 11, lines 61-67 and col. 12, lines 1-3).

Mikhail does not expressly teach supplying setpoint values to a second controlled variable conversion device as input variables; and outputting, by the second controlled variable conversion device, setpoint values for the output.

Osder teaches supplying setpoint values (Fig. 6, element 522) to a second controlled variable conversion device (Fig. 6, element 524) as input variables (col. 10, lines 48-59); and outputting, by the second controlled variable conversion device, setpoint values for the output (col. 10, lines 40-59).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the teaching of Vos to include supplying setpoint values for the propeller speed and the propeller performance to provide maximal energy capture, torque control, elimination of voltage flicker, as well as power factor control (Mikhail: col. 20, lines 10-13); and supplying setpoint values to a second controlled variable conversion device as input variables; and outputting, by the second controlled variable conversion device, setpoint values for the output to avoid entering autogyro states, and not requiring flight path changes, such as dives, to enter a conversion regime where the rotor is stopped (Osder: col. 2, lines 2-6).

25. As per claim 35, Vos does not expressly teach ascertaining corresponding control deviations from the actual values and corresponding setpoint values for the propeller speed and the turbine output; supplying the propeller speed control deviation to a speed controller; and supplying the turbine output control deviation to a power controller.

Mikhail teaches ascertaining corresponding control deviations from the actual values and corresponding setpoint values for the propeller speed (col. 7, lines 51-53 and col. 8, lines 47-54 and 66-67) and the turbine output (col. 5, lines 24-44, col. 11, lines 61-67 and col. 12, lines 1-3); supplying the propeller speed control deviation to a speed controller (col. 7, lines 51-53 and col. 8, lines 47-54 and 66-67); and supplying the turbine output control deviation to a power controller (col. 5, lines 24-44, col. 11, lines 61-67 and col. 12, lines 1-3).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the teaching of Vos to include ascertaining corresponding control deviations from the actual values and corresponding setpoint values for the propeller speed and the turbine output; supplying the propeller speed control deviation to a speed controller; and supplying the turbine output control deviation to a power controller to provide maximal energy capture, torque control, elimination of voltage flicker, as well as power factor control (col. 20, lines 10-13).

26. As per claim 36, Vos teaches wherein the propeller blade angle of incidence and the fuel stream are ascertained in the propeller blade angle of incidence (i.e. the curves of the map are characterized by a function of pitch angle) and the fuel stream (the curves of the map are characterized by a function of fuel consumption) ascertaining step in the conversion device (col. 6, lines 6-8 and col. 7, lines 2-15).

Vos does not expressly teach outputting a torque request as an output variable by the speed controller; and outputting a turbine output request as an output variable by the power controller; wherein the propeller blade angle of incidence and the fuel stream are ascertained in the propeller blade angle of incidence and the fuel stream ascertaining step in the conversion device from the torque request and the turbine output request.

Mikhail teaches outputting a torque request as an output variable by the speed controller (col. 7, lines 51-53 and col. 8, lines 47-54 and 66-67); and

outputting a turbine output request as an output variable by the power controller (col. 5, lines 24-44, col. 11, lines 61-67 and col. 12, lines 1-3);

wherein the parameters are ascertained in the parameter ascertaining step in the conversion device from the torque request (col. 7, lines 51-53 and col. 8, lines 47-54 and 66-67) and the turbine output request (col. 5, lines 24-44, col. 11, lines 61-67 and col. 12, lines 1-3).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the teaching of Vos to include outputting a torque request as an output variable by the speed controller; and outputting a turbine output request as an output variable by the power controller; wherein the parameters are ascertained in the parameter ascertaining step in the conversion device from the torque request and the turbine output request to provide maximal energy capture, torque control, elimination of voltage flicker, as well as power factor control (col. 20, lines 10-13).

Response to Arguments

27. Applicant's arguments see Remarks pgs. 8-9, filed 10 June 2008 with respect to claims 21-24, 27-29 and 32 under 35 U.S.C. 102(b) have been fully considered but they are not persuasive.

28. Applicant argues that the prior art fails to teach, "a conversion device having input variables corresponding to output variables of the controllers; a conversion device configured to calculate, at least from the output variables of the controllers, the correcting variables; or a conversion device configured to superimpose, on the output variables of the controllers, an input control component that is a function of an actual value to calculate the correcting variables." The Examiner respectfully disagrees.

Vos discloses (col. 6, lines 1-8) "Inputs to **the FADEC which are used in the SLPC algorithm include flight condition inputs such as the true air speed 38, the ambient air pressure 40, and the ambient air temperature 42.** Input from the single lever 44 is provided to the FADEC 30 through the line 46.

The FADEC 30 receives inputs from the various engine control sensors and provides control outputs to the various servos as depicted in FIG. 1. Specifically, the CPU 32 outputs throttle servo commands to the throttle servo 24, and receives MAP sensor signals from the MAP sensor 26."

(col. 6, lines 13-19) "For controlling the engine performance parameters, **the CPU 32 also receives a number of engine status parameters** such as Exhaust Gas Temperature (EGT), Cylinder Head Temperature signals (CHTs), Universal Exhaust Gas Oxygen sensor signals (UEGO), Air Charge Temperature signals (ACT), Mass Airflow signals (MAF), and the Exhaust Pressure Signals (PEXH), over a bus 50."

(col. 7, lines 2-8) "In operation, the pilot commands the desired thrust percentage 64 by using the single lever 44 (FIG. 1). **The control mixing algorithm (preferably, a software subroutine running in the FADEC 30) transforms the input thrust percentage into a MAP set point to control the engine power/load controller 66 which, in the proposed embodiment, drives the throttle servo 24 and the waste gate servo 20 (FIG. 1) to achieve the desired inlet manifold pressure.**

(col. 7, lines 10-15) "The **control algorithm 62 also outputs a propeller speed set point (RPM) to the propeller speed controller 68 which, in the preferred embodiment, includes pitch servo 6, to control propeller speed by actuating the propeller pitch until the measured speed matches the speed set point."**

In summary, Vos discloses the FADEC which uses output variables of the controllers (i.e. servos), wherein the FADEC transforms the outputs into a set point, to superimpose the setpoint on the output of the controllers to obtain an input control component to the controller which is a function of the an actual value (i.e. the output of

the controller) to calculate the correction variables (i.e. the result of the mixing algorithm) to achieve the desired parameter of the controller. Hence, Vos meets Applicant's claimed limitations "a conversion device having input variables corresponding to output variables of the controllers; a conversion device configured to calculate, at least from the output variables of the controllers, the correcting variables; or a conversion device configured to superimpose, on the output variables of the controllers, an input control component that is a function of an actual value to calculate the correcting variables."

29. Applicant's arguments see Remarks pgs. 8-9, filed 10 June 2008 with respect to claims 25, 26, 30, 31 and 33-36 under 35 U.S.C. 103(a) have been fully considered but they are not persuasive.

30. Claims 25, 26, 30, 31 and 33-36 stand rejected under 35 U.S.C. 103(a) as set forth above.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer L. Norton whose telephone number is (571)272-3694. The examiner can normally be reached on 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert Decady can be reached on 571-272-3819. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ryan A. Jarrett/
Primary Examiner, Art Unit 2121

08/25/08